for access to the disk **2** from the host computer received after the loading. In the present embodiment, the apparatus can be selectively set in the ready state according to the state in which the disk **2** is loaded. Therefore, excess power consumption is prevented and the life of the laser is not shortened. As a result, the degradation in quality of the optical disk apparatus **1** can be prevented and the life of the apparatus can be increased.

FIG. **3** is a flow chart illustrating the operation of an optical disk apparatus according to a second embodiment of the present invention.

The second embodiment is a modification of the first embodiment. Specifically, a modification is made to the apparatus driving operation, in the case where the optical disk **2** was left for a predetermined time period and automatically loaded.

The operation of the controller **6** will now be described in detail with reference to the flow chart of FIG. **3**.

When power is turned on, the controller **6** determines whether or not the insertion detection signal INSERT is **1** (step **S21**) and finds whether the optical disk **2** is inserted in the holder **3** of the optical disk apparatus **1**.

If the disk **2** is not inserted in the apparatus **1** (INSERT is 0), the control routine goes to step **S22** and it is determined whether or not the insertion detection signal INSERT is 1. The control does not proceed until the disk **2** is inserted in the holder **3**.

If the disk **2** is inserted (INSERT=1), the control goes to step **S23**. In step **S4**, the apparatus starting operation is performed, and the spindle motor unit **7** is controlled to activate the spindle motor. The laser (not shown) within the pickup **9** is turned on and the actuator (not shown) within the pickup unit **9** is controlled. Thereby, the focusing servo and tracking servo are effected. Thus, the optical disk apparatus **1** is set in the ready state in which reproduction, recording or erasure of information can be effected on the optical disk **2**.

On the other hand, if INSERT=1 in step **S21**, i.e. if the optical disk **2** is inserted in the holder **3** of the optical disk apparatus **1**, the control routine goes to step **25** to determine whether the optical disk **2** is mounted on the spindle motor unit **7**. If the disk **2** is mounted, the control goes to step **S24** to effect the apparatus starting operation. In step **S25**, if the optical disk **2** is not mounted on the spindle motor unit **7**, the control goes to step **S26** to start the timer unit **11**, thereby counting the time needed for the optical disk apparatus **1** to automatically load the disk **2**.

Thereafter, it is monitored in step **S27** whether the disk **2** has been removed from the optical disk apparatus **1**, it is monitored in step **S28** whether the eject/load SW **10** has been depressed to generate a loading request, and it is monitored in step **S29** whether the timer has counted up.

In step **S27**, it is determined whether INSERT=1, i.e. whether the optical disk **2** has been removed from the optical disk apparatus **1**. If it is determined that the disk **2** has been removed from the apparatus, the control routine goes to step **S22** and the operations of and after the disk insertion wait will be performed.

If the state of INSERT=1 remains in step **S27**, it is monitored in step **S28** whether or not request signal REQ=1, i.e. whether the eject/load SW **10** has been depressed and a loading request has been issued. If the loading request has been issued and REQ=1, the control goes to step **S23** and the operations of and after the loading will be executed.

If the state of REQ=0 remains in step **S28**, it is determined whether the timer has counted up in step **S29**. If the timer has not counted up, the control returns to step **S27**, and the operations of and after step **S27** will be repeated. If the counting up of the timer has been detected in step **S29**, the loading is executed in step **S30** and in step **S31** an apparatus start operation (**1**) is executed. In the apparatus start operation (**1**), only the spindle motor which requires much start time is started and the operations of and after step **S32** will be executed.

When the optical disk **2** is mounted, the controller **6** monitors the request signal REQ in step **S32** and detects an eject request issued by the depression of the eject/load SW **10**. In step **S33**, reception of a command from the host computer is detected, and an eject request or a command from the host computer is awaited.

If it is determined in step **S32** that the eject/load SW **10** has been depressed and the issuance of the eject request has been detected, the control goes to step **S34**, and the operation for stopping the apparatus is executed. In step **S35**, the eject operation is executed and the control returns to step **S26**.

If the command from the host computer has not been received in step **S33**, the control returns to step **S32**. If that command has been received, the command is executed in step **S36** and the subsequent steps.

At first, it is determined in step **S36** whether the received command is an eject command. If it is the eject command, the apparatus halt operation is executed in step **S34** and the eject operation is executed in step **S35**. Thereafter, the operations of and after step **S26** will be carried out. If the received command is not the eject command in step **S36**, it is determined in step **S37** whether or not the optical disk apparatus **1** is in the ready state.

If the apparatus **1** is not in the ready state in step **S37**, an apparatus start operation (**2**) is executed in step **S38** and then the command is executed in step **S39**. In the apparatus start operation (**2**), the laser is turned on, and the focusing servo and tracking servo are turned on. If the apparatus **1** is in the ready state, the control goes to step **S39** and the command is executed.

After the command from the host computer is executed in step **S39**, the control returns to step **S32** and the eject request or the command from the host computer is awaited.

As has been described above, like the first embodiment, when the optical disk **2** is inserted and loaded in the optical disk apparatus **1** ("YES" in step **S22**) or when the eject/load SW **10** is depressed ("YES" in step **S28**) while the optical disk **2** is left in the eject position of the apparatus **1** and the disk **2** is loaded, i.e. when the optical disk **2** is loaded according to the user's request, the apparatus start operation is executed in step S4 and the apparatus is set in the ready state. Thus, in the steps of and after **S32**, the optical disk **2** can immediately be accessed in response to the command from the host computer.

Besides, in the case where the optical disk **2** is left in the eject position for a predetermined time period ("YES" in step **S29**) and it is automatically loaded, only the spindle motor which requires much start time is started in the apparatus start operation (**1**). Until the command from the host computer for access to the optical disk **2** is received after the loading, the apparatus start operation (**2**) including turning-on of the laser, etc. is not executed. Thus, the apparatus can be selectively set in the ready state according to the state in which the disk **2** is loaded. Therefore, unnecessary turning-on of the laser is prevented and power consumption due to focusing servo and tracking servo is reduced. Since the life of the laser is not shortened, the life